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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,004	09/21/2000	David L. Adams	3339 P 007	8314
24573	7590	02/23/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC PO BOX 1135 CHICAGO, IL 60690-1135			HIRL, JOSEPH P	
			ART UNIT	PAPER NUMBER
			2121	9

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/668,004

**Applicant(s)**

ADAMS ET AL.

**Examiner**

Joseph P. Hirl

**Art Unit**

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>January 23, 2001</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-30 are pending in this application.
2. The claims and only the claims form the metes and bounds of the invention.  
"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

3. Examiner's Opinion:

Applicant is encourage to fully review para 2 above. Concepts related to personalization and emotion generation are well known to the art as illustrated by Kleindienst et al (IBM). The claims need to be reworked to bring forth what is really being claimed.

***Abstract***

4. Line 2: "...a character for a learner to interact with." appears to mean that the character is the learner to which one interacts. If the character is the learner, what function does the user play?

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The abstract is 269 words long.

These objections must be corrected.

***Claim Objection***

6. Claim 26 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 26 references both rate of change and direction of change and is dependent to claims 24 and 25. Claim 24

references only rate of change; claim 25 references only direction of change. Claim 26 is broader than the claims to which it depends in both cases.

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The practical application test requires that a useful, concrete and tangible result be accomplished. Claims 1-30 represent abstract methodology and therefore are intangible. The consequence is non-statutory.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-30 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); In re Kirk, '376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**"). See, MPEP 21107.01 (IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-30 are rejected on this basis.

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 8-16 and 30 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The term "effect force" was not identified in the specification.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 2-4, 21, 22, 23, 26, 29 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 2, 3, 4**

The terms "reflect a state of mind", "reflect a personality" and a "desire to buy" are expansive in meaning and renders the respective claim indefinite.

**Claim 21**

The term "more difficult" is a relative term and renders the claim indefinite.

**Claim 22**

Claim 22 is confusing. Does the character actually have a learner trait value and a competitor trait value...two values for the character? Is the learner competing with itself? The learner is supposed to be the user. If the learner is the user, how can the character have the learner's trait value? How does the learner attempt to raise the learner trait value if the character has the learner trait value? Who is the competitor? How can a competitor raise the competitor trait value if such value belongs to the character? Following such uncertainty, the claim is indefinite.

**Claim 23**

The confusion of claim 23 follows from claim 22. How does the competitor trait level raise in the face of a learner trait value, both duly assigned to the character? Following such uncertainty, the claim is indefinite.

**Claim 26**

Rate of change, which is numeric and normally real, can have a maximum, minimum and default value. However, the direction of change can have only two values and is typically noted as plus or minus. Claim 26 defines the direction of change as minimum, maximum and a default value. Minimum and maximum can be minus and plus, respectively. However, what is to be done about the default value where it can only be a minimum or maximum...uncertainty. The claim is indefinite.

**Claims 29 and 30**

The term "particular manner" has application any place in the range of manner and is therefore lacking in specificity and renders the claims indefinite.

13. Claims 28, 29 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 28**

How does the system operate with the first and second codes unattached?

**Claim 29**

This is a method of creating a data structure comprising a data structure and a data structure comprising values. Can the applicant clarify what is actually being claimed?



**Claim 30**

This is a system for creating a data structure comprising a data structure and a data structure comprising values. Can the applicant clarify what is actually being claimed?

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Kleindienst et al (U.S. Patent 6,658,388).

**Claim 1**

Kleindienst anticipates providing a simulation interface through a simulation software code, wherein the character appears within the simulation interface (Kleindienst, c 11, l 9-24; Examiner's Note (EN); Kleindienst character appears within the conversational form of an interface); providing a data storage area for storing at least one trait of the character, the at least one trait having a trait value (Kleindienst, c 11, l 9-24; c 1, l 33-43; EN: traits and attributes are synonymous); communicating

possible statements and/or actions through the simulation interface to the learner (Kleindienst, c 11, l 9-24; c 1, l 33-43); receiving from the learner a chosen statement or action from the possible statements and/or actions (Kleindienst, c 1, l 44-62); responding to the statement or action chosen by the learner by providing a character response by the character, wherein the character response provided is determined by the trait value of the at least one trait (Kleindienst, c 1, l 44-62); and, generating new possible statements and/or actions for the learner contained within the data storage area (Kleindienst, c 11, l 9-24; c 1, l 33-62).

**Claim 2**

Kleindienst anticipates the data storage area stores a plurality of character traits which together reflect a state of mind of the character (Kleindienst, c 1, l 44-62).

**Claim 3**

Kleindienst anticipates the data storage area stores a plurality of character traits which together reflect a personality of the character (Kleindienst, c 2, l 37-43).

**Claim 4**

Kleindienst anticipates wherein the at least one character trait is a desire to buy a product or a service (Kleindienst, c 2, l 37-43; EN: para 2 applies; to one of ordinary skill in the art, the desire to buy a product or service is initiated by a need; happiness is fulfilled when needs are fulfilled: Kleindienst teaches happiness at c 4, l 42-45).

**Claim 5**

Kleindienst anticipates the data storage area is a dynamic data model (Kleindienst, c 2, l 44-50; c 3, l 15-31; EN: the data is constantly undergoing change as the emotion levels change).

**Claim 6**

Kleindienst anticipates the dynamic data model is independent of the simulation software code (Kleindienst, c 2, l 44-50; c 3, l 15-31; EN: para 2 above applies; to one of ordinary skill in the art, the simulation software code is developed is not data and therefore is independent or different).

**Claim 7**

Kleindienst anticipates the trait value of the at least one trait is calculated by adding a previous trait value with a trait change value for the at least one trait (Kleindienst, c 2, l 29-31).

**Claim 8**

Kleindienst anticipates the trait change value for the at least one trait is calculated by adding a previous trait change value with an effect force (Kleindienst, c 2, l 29-31).

**Claim 9**

Kleindienst anticipates wherein the effect force is determined by whether the learner has selected a neutral statement or action (Kleindienst, c 2, l 29-31; EN: personality is determined quantitatively),

**Claim 10**

Kleindienst anticipates the effect force is determined by whether the learner has identified a problem (**Kleindienst**, c 2, l 29-31; EN: personality is determined quantitatively and changes as a function of the user interface).

**Claim 11**

Kleindienst anticipates the effect force is determined by whether the learner has identified a solution (**Kleindienst**, c 2, l 29-31; EN: personality is determined quantitatively and changes as a function of the user interface).

**Claim 12**

Kleindienst anticipates the effect force is determined by whether the learner has identified a solution after the learner has met a problem threshold value (**Kleindienst**, c 4, l 6-67; c 5, l 16-67; EN: personality is determined quantitatively and changes as a function of the user interface).

**Claim 13**

Kleindienst anticipates the effect force is determined by whether the learner has identified a correct answer (**Kleindienst**, c 4, l 6-67; c 5, l 16-67; EN: personality is determined quantitatively and changes as a function of the user interface).

**Claim 14**

Kleindienst anticipates the effect force is determined by whether the learner has identified an incorrect answer (**Kleindienst**, c 4, l 6-67; c 5, l 16-67; EN: personality is determined quantitatively and changes as a function of the user interface).

**Claim 15**

Kleindienst anticipates the respective effect force depends on at least one predetermined value that is selectable by a designer (**Kleindienst**, c 13, claim 10).

**Claim 16**

Kleindienst anticipates the effect force is determined by a decay (**Kleindienst**, c 9, l 26-30).

**Claim 17**

Kleindienst anticipates the decay is negative when the learner has positively impacted the trait value (**Kleindienst**, c 10, l 9-14; EN: para 2 applies; to one of ordinary skill in the art, a positive impact is when there is no negative impact to the stimuli).

**Claim 18**

Kleindienst anticipates the decay is positive when the learner has negatively impacted the trait value (**Kleindienst**, c 9, l 62-67; EN: para 2 applies; to one of ordinary skill in the art, a negative impact is when there an impact to the stimuli).

**Claim 19**

Kleindienst anticipates wherein the decay has a rate and direction that are selectable by a designer (**Kleindienst**, c 10, l 37-51; c 9, l 46-47; EN: the decay rate is alpha and the direction depends on emotion function used).

**Claim 20**

Kleindienst anticipates the trait value has a minimum trait value, a maximum trait value, and a default trait value (**Kleindienst**, c 6, l 65-67; c 9, l 41-50).

**Claim 21**

Kleindienst anticipates the trait value has a minimum limit threshold value and a maximum limit threshold value, wherein it becomes more difficult for the learner to have a trait value that reaches the minimum trait value once the trait value reaches the minimum limit threshold, and wherein it becomes more difficult for the learner to have a trait value that reaches the maximum trait value once the trait value reaches the maximum limit threshold (**Kleindienst**, c 9, l 41-50; EN: to one of ordinary skill in the art, once a maximum or minimum is reached, it is axiomatic that a boundary condition has been reached).

**Claim 22**

Kleindienst anticipates the character has a learner trait value and a competitor trait value, and wherein the learner competes with a competitor, the learner attempting to raise the learner trait value and the competitor attempting to raise the competitor trait value of the character (**Kleindienst**, c 9, l 41-67; EN: as noted above, this claim is uncertain; for sure Kleindienst teaches personality changes).

**Claim 23**

Kleindienst anticipates when the competitor trait value raises, the learner trait value is negatively affected (**Kleindienst**, c 9, l 41-67; EN: as noted above; this claim follows claim 23 and is uncertain; for sure Kleindienst teaches personality changes and both growing and dissipating emotions).

**Claim 24**

Kleindienst anticipates at least one trait has a rate of change (**Kleindienst**, c 9, l 41-50).

**Claim 25**

Kleindienst anticipates at least one trait has a direction of change (**Kleindienst**, c 9, l 62-67; c 10, l 1-18).

**Claim 26**

Kleindienst anticipates the rate of change and the direction of change each have a minimum, a maximum, and a default value (**Kleindienst**, c 9, l 62-67; c 10, l 1-18; EN: as noted above).

**Claim 27**

Kleindienst anticipates providing a data storage area for storing at least one trait of the character, the at least one trait having a trait value (**Kleindienst**, c 9, l 62-67; c 5, l 16-28); receiving from the learner a chosen statement or action (**Kleindienst**, c 1, l 33-43); responding to the statement or action chosen by the learner by providing a character response by the character, wherein the character response provided is determined by the trait value of the at least one trait (**Kleindienst**, c 1, l 33-62).

**Claim 28**

Kleindienst anticipates a data storage area for storing at least one trait of the character, the at least one trait having a trait value (**Kleindienst**, c 9, l 62-67; c 5, l 16-28); a first code segment for receiving from the learner a chosen statement or action (**Kleindienst**, c 1, l 33-43; c 2, l 44-49); a second code segment responding to the

statement or action chosen by the learner by providing a character response by the character, wherein the character response provided is determined by the trait value of the at least one trait (**Kleindienst**, c 1, l 33-62).

**Claims 29, 30**

Kleindienst anticipates providing character trait data structure editing software (**Kleindienst**, c 1, l 33-43; c 2, l 44-49); creating a data structure comprising a set of initial values for the character trait, a set of personalization variables for the character which cause the character to respond in a particular manner to selections of the learner, and set of effect values for use within the calculation of a trait value for the character trait in response to the selections of the learner (**Kleindienst**, c 1, l 33-43; c 2, l 44-49; EN: Kleindienst's teachings).

***Conclusion***

16. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Rosenberg et al, U.S. Patent 5,739,811
- Knight et al, U.S. Patent 5,676,551
- Stoneman, U.S. Patent 6,651,044
- Bro, U.S. Patent 5,722,418
- Kikinis, U.S. Patent 6,319,010
- Surace et al, U.S. Patent 6,144,938



17. Claims 1-30 are rejected.

***Correspondence Information***

18. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anil Khatri can be reached at (703) 305-0282.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,  
Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).

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Hand-delivered responses should be brought to:

Receptionist, Crystal Park II

2121 Crystal Drive,

Arlington, Virginia.

Joseph P. Hird

February 19, 2004